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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/383,481	08/26/1999	RIKU RIMPELA	460-008876-U	6634

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EXAMINER

YUN, EUGENE

ART UNIT	PAPER NUMBER
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2682

DATE MAILED: 06/19/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/383,481

Applicant(s)

RIMPELA ET AL.

Examiner

Eugene Yun

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 December 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/22/2003 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honkasalo et al. (US 5,995,496) in view of Li (US 5,673,266).

Referring to Claim 1, Honkasalo teaches a method for controlling the operation of a mobile station in a packet switched communication network based on a cellular network, which communication network is arranged to transfer information using downlink or uplink data transmission between a base station and at least one mobile station by means of a radio channel, comprising the step of:

using a transmission power on a set level on the radio channel to transfer information (see ABSTRACT).

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Honkasalo does not teach transmitting information that is divided into successive blocks of the downlink data transmission from the base station to the mobile station on the radio channel, and wherein one of said blocks comprises information on the transmission power level of said one block of the downlink data transmission or another block of the downlink data transmission to be transmitted subsequently. Li teaches transmitting information that is divided into successive blocks of the downlink data transmission from the base station to the mobile station on the radio channel (see col. 2, lines 25-31), and wherein one of said blocks comprises information on the transmission power level of said one block of the downlink data transmission or another block of the downlink data transmission to be transmitted subsequently (see col. 2, lines 13-16 and lines 31-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Li to said method of Honkasalo in order to reduce processing load by the mobile station upon receiving the information.

Referring to Claim 8, Honkasalo teaches a communication system for implementing packet switched data transmission based on a cellular network, which communication system is arranged to transmit information using downlink or uplink data transmission between a base station and at least one mobile station by means of a radio channel, comprising:

means for arranging data transmission on the radio channel to take place with a transmission power on a set level (see ABSTRACT).

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Honkasalo does not teach means for arranging the radio channel to transmit information that is divided into successive blocks of the downlink data transmission from the base station to the mobile station, and means for also arranging the communication system to transmit one of said blocks containing information on the transmission power level of said one block or another block to be transmitted subsequently. Li teaches means for arranging the radio channel to transmit information that is divided into successive blocks of the downlink data transmission from the base station to the mobile station (see col. 2, lines 25-31), and means for also arranging the communication system to transmit one of said blocks containing information on the transmission power level of said one block or another block to be transmitted subsequently (see col. 2, lines 13-16 and lines 31-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Li to said method of Honkasalo in order to reduce processing load by the mobile station upon receiving the information.

Referring to Claim 9, Honkasalo teaches a wireless communication device, arranged to function in a communication system, which communication system is arranged to implement packet switched data transmission based on a cellular network, and which communication system is arranged to transmit information using downlink or uplink data transmission between a base station and said wireless communication device by means of a radio channel, comprising:

means for arranging data transmission on the radio channel to take place with a transmission power on a set level (see ABSTRACT).

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Honkasalo does not teach means for arranging the radio channel to transmit information that is divided into successive blocks of the downlink data transmission from the base station to the wireless communication device, and means in the wireless communication device arranged to receive one of said blocks transmitted by the base station on the radio channel, which one block contains information on the transmission power level of said one block or another block to be transmitted subsequently. Li teaches means for arranging the radio channel to transmit information that is divided into successive blocks of the downlink data transmission from the base station to the wireless communication device (see col. 2, lines 25-31), and means in the wireless communication device arranged to receive one of said blocks transmitted by the base station on the radio channel, which one block contains information on the transmission power level of said one block or another block to be transmitted subsequently (see col. 2, lines 13-16 and lines 31-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Li to said method of Honkasalo in order to reduce processing load by the mobile station upon receiving the information.

Referring to Claim 2, Li also teaches said one block comprising information on the transmission power level of another block to be transmitted next (see Col. 2, lines 13-16).

Referring to Claim 3, Honkasalo also teaches said one block comprising information on the transmission power level of said one block (see col. 8, lines 1-4).

Referring to Claim 6, Honkasalo also teaches said transmission power level indicated as a difference with respect to a known reference level (see col. 8, lines 25-32).

Referring to Claim 7, Honkasalo also teaches said known reference level as a BCCH channel according to the GPRS system (see col. 6, lines 40-53).

4. Claims 10-12 rejected under 35 U.S.C. 103(a) as being unpatentable over Honkasalo et al. (US 5,995,496) in view of Grubeck et al. (US 6,449,484).

Referring to Claim 10, Honkasalo teaches a method for controlling the function of a mobile station in a packet switched communication network based on a cellular network, which communication network is arranged to transfer information using downlink or uplink data transmission between a base station and at least one mobile station by means of a radio channel, comprising the steps of:

using a transmission power on a set level on the radio channel to transfer information (see ABSTRACT),

transmitting information that is divided into successive blocks from the base station to the mobile station on the radio channel (see col. 7, lines 48-50), and

transmitting a block that is transmitted repeatedly and at fixed intervals, with a fixed transmission power known by said mobile station, in order to establish a reference level (see col. 12, lines 31-35).

Honkasalo does not teach the process of transmitting information divided into successive blocks of the downlink data transmission from the base station to the mobile

station. Grubeck teaches the process of transmitting information divided into successive blocks of the downlink data transmission from the base station to the mobile station (see col. 12, lines 40-45 and lines 55-58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Grubeck to said method of Honkasalo in order to better prepare the mobile station to receive information by providing a faster procedure for setting reception parameters.

Referring to Claim 11, Honkasalo teaches a communication system for implementing packet switched data transmission based on a cellular network, which communication system is arranged to transmit information using downlink or uplink data transmission between a base station and at least one mobile station by means of a radio channel, comprising the steps of:

means for arranging the information transmission on the radio channel to occur with a transmission power on a set level (see ABSTRACT),

means for arranging said radio channel to transmit information that is divided into successive blocks, from the base station to the mobile station (see col. 7, lines 48-50), and means for also arranging the communication system to transmit, at a fixed transmission power known by said mobile station, a block that is transmitted repeatedly and at fixed intervals, to establish a reference level and control the mobile station (see col. 12, lines 31-35).

Honkasalo does not teach the process of transmitting information divided into successive blocks of the downlink data transmission from the base station to the mobile station. Grubeck teaches the process of transmitting information divided into successive

blocks of the downlink data transmission from the base station to the mobile station (see col. 12, lines 40-45 and lines 55-58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Grubeck to said method of Honkasalo in order to better prepare the mobile station to receive information by providing a faster procedure for setting reception parameters.

Referring to Claim 12, Honkasalo teaches a wireless communication device, arranged to function in a communication system arranged for implementing packet switched data transmission based on a cellular network, and which communication system is arranged to transmit information using downlink or uplink data transmission between a base station and wireless communication device by means of a radio channel, wherein data transmission on the radio channel is arranged to take place with a transmission power on a set level (see ABSTRACT), and which the radio channel is arranged to transmit information that is divided into successive blocks, from the base station to the wireless communication device (see col. 7, lines 48-50), and wherein the wireless communication device is also arranged to receive a block that is transmitted repeatedly and at fixed intervals from the base station with a fixed transmission power known by said mobile station, to establish a reference level for the wireless communication device and to control its function (see col. 12, lines 31-35).

Honkasalo does not teach the process of transmitting information divided into successive blocks of the downlink data transmission from the base station to the mobile station. Grubeck teaches the process of transmitting information divided into successive blocks of the downlink data transmission from the base station to the mobile station (see

col. 12, lines 40-45 and lines 55-58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Grubeck to said method of Honkasalo in order to better prepare the mobile station to receive information by providing a faster procedure for setting reception parameters.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honkasalo and Li in view of Hamalainen et al. (US 6,359,904).

Honkasalo teaches an RLC block according to the GPRS system used as said one block (see col. 11, lines 18-20). The combination of Honkasalo and Li does not teach the information on the transmission power level transmitted by means of an MAC header in the RLC block. Hamalainen teaches the information on the transmission power level transmitted by means of an MAC header in the RLC block (see col. 3, lines 65-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Hamalainen to said communications network of Honkasalo in order to reduce the use of too high power levels in a mobile station.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honkasalo, Li, and Hamalainen as applied to claim 1 above, and further in view of Turina (US 6,031,832).

Hamalainen teaches said transmissions power level indicated by means of bits contained in an octet of said MAC header (see col. 9, lines 23-38). The combination of

Honkasalo, Li, and Hamalainen does not teach at least some of the bits being arranged for a TFI field in a way known as such. Turina teaches at least some of the bits being arranged for a TFI field in a way known as such (see col. 7, lines 48-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Hamalainen to said communications network of Honkasalo in order to reduce the use of too high power levels in a mobile station.

7. Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honkasalo and Li in view of Whitehead (US 6,157,616).

Referring to Claim 13, the combination of Honkasalo and Li does not teach the mobile station using the transmission power level information to determine if a change in a received signal is caused by the base station or an environmental change. Whitehead teaches the mobile station using the transmission power level information to determine if a change in a received signal is caused by the base station or an environmental change (see col. 6, lines 26-29 and lines 41-42). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Whitehead to said communications network of Honkasalo in order to reduce error in measurements so proper adjustments to equipment can be made.

Referring to Claim 14, Whitehead also teaches using the transmission power level information to adjust at least one parameter in the mobile station (see col. 6, lines 26-37).

Referring to Claim 15, Whitehead also teaches the parameter as timing, frequency, or amplification (see col. 6, lines 55-56).

Referring to Claim 16, Whitehead also teaches using the transmission power level information to adjust a reception level in the mobile station to a correct range (see col. 6, lines 26-29).

Response to Arguments

8. Applicant's arguments with respect to claims 1, 8, and 9 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eugene Yun whose telephone number is (703) 305-2689. The examiner can normally be reached on 8:30am-5:30pm Alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (703) 308-6739. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

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Eugene Yun
Examiner
Art Unit 2682

EY
June 13, 2003


Lee Nguyen
Primary Examiner